

### **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the present application. Please amend, without prejudice, the claims in the current application as provided below in the Listing of the Claims.

### **LISTING OF THE CLAIMS:**

Claims 1 to 17 (Cancelled)

18. (Currently Amended) A method for the pretreatment of an aqueous solution containing radioactive thorium prior to passing the aqueous solution through a quantity of ion exchange resin at a substantially constant flow rate for removal of the thorium, comprising the steps of:

diluting the aqueous solution with water; and  
removing organic material from the aqueous solution by filtering.

19. (Currently Amended) The method of claim ~~39~~ 18, comprising the further step of adding complexing agents to the aqueous solution.

20. (Currently Amended) The method of claim ~~40~~ 19, wherein the complexing agent binds fluoride.

21. (Currently Amended) The method of claim ~~40~~19, wherein the complexing agent is aluminum.

22. (Currently Amended) The method of claim ~~39~~18, wherein the amount of water used is sufficient to reduce a concentration of nitric acid in the aqueous solution to 1.0 molar or less.

23. (Currently Amended) The method of claim ~~39~~18, comprising the further step of adjusting an acid or base concentration of the aqueous solution.

24. (Currently Amended) The method of claim ~~39~~18, comprising the

further step of passing the aqueous solution through activated charcoal.

25. (Currently Amended) The method of claim ~~39~~ 18, wherein the aqueous solution is an effluent from a solvent extraction uranium purification process.